

FILE 'HOME' ENTERED AT 12:35:20 ON 14 JUN 2002

=> st off

ST IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> cost off

COST IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> e soyasaponin

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

The EXPAND command is used to look at the index in a file
which has an index. This file does not have an index.

=> file ca plus

'PLUS' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.42

FILE 'CA' ENTERED AT 12:36:18 ON 14 JUN 2002

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FILE 'CAPLUS' ENTERED AT 12:36:18 ON 14 JUN 2002

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=> e soyasaponin

E1	69	SOYASAPOPENOLS/BI
E2	2	SOYASAPONGENOL/BI
E3	497	--> SOYASAPONIN/BI
E4	2	SOYASAPONINA3/BI

E5 182 SOYASAPONINS/BI
E6 2 SOYASAPOYENOL/BI
E7 2 SOYASAUCE/BI
E8 2 SOYASE/BI
E9 1 SOYASIGNAL/BI
E10 2 SOYASOPOGENOL/BI
E11 4 SOYASPOGENOL/BI
E12 2 SOYASPOGENOLS/BI

=> s e3

L1 527 SOYASAPONIN/BI

=> s l1 and isolation

L2 98 L1 AND ISOLATION

=> s l2 and molasses

L3 2 L2 AND MOLASSES

=> s l1 and nutraceutical

L4 0 L1 AND NUTRACEUTICAL

=> s l1 and drink

L5 0 L1 AND DRINK

=> dis l3 1-2 bib abs

L3 ANSWER 1 OF 2 CA COPYRIGHT 2002 ACS

AN 131:142039 CA

TI Novel Isoflavone, Cinnamic Acid, and Triterpenoid Glycosides in Soybean Molasses

AU Hosny, Mohammed; Rosazza, John P. N.

CS Division of Medicinal and Natural Products Chemistry Center for Biocatalysis and Bioprocessing, College of Pharmacy The University of Iowa, Iowa City, IA, 52242, USA

SO Journal of Natural Products (1999), 62(6), 853-858

CODEN: JNPRDF; ISSN: 0163-3864

PB American Chemical Society

DT Journal

LA English

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Seven known isoflavones, genistein, daidzein, glycitein, formononetin, genistin, daidzin, and glycitein 7-O-.beta.-D-(6"-O-acetylglucopyranoside), ferulic acid, and two known saponin glycosides, soysaponin I and soysaponin A2, were isolated from soybean molasses. Several new compds. were also isolated and identified, including three isoflavones I and II (R1 = H, R2 = OH; R1 = R2 = OMe), two cinnamic acid ester glycosides III (R3 = OH, R4 = H; R3 = R4 = OMe), and a new saponin hexaglycoside IV. The structures of the new compds. were established on the basis of spectral data interpretation.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1999:304439 CAPLUS

DN 131:142039

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AU Hosny, Mohammed; Rosazza, John P. N.

CS Division of Medicinal and Natural Products Chemistry Center for Biocatalysis and Bioprocessing, College of Pharmacy The University of Iowa, Iowa City, IA, 52242, USA

SO Journal of Natural Products (1999), 62(6), 853-858

CODEN: JNPRDF; ISSN: 0163-3864

PB American Chemical Society

DT Journal

LA English

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RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s e1

L6 69 SOYASAPOPENOLS/BI

=> s 16 and chromatography

L7 31 L6 AND CHROMATOGRAPHY

=> s 17 and formic

L8 0 L7 AND FORMIC

=> s 17 and ethanol

L9 0 L7 AND ETHANOL

=> s 17 and isolation

L10 5 L7 AND ISOLATION

=> dis l7 1-5 bib abs

L7 ANSWER 1 OF 31 CA COPYRIGHT 2002 ACS

AN 127:120904 CA

TI Effect of germination, under different environmental conditions, on saponins, phytic acid and tannins in lentils (*Lens culinaris*)

AU Ayet, G.; Burbano, C.; Cuadrado, C.; Pedrosa, M. M.; Robredo, L. M.; Muzquiz, M.; de la Cuadra, C.; Castano, A.; Osagie, A.

CS Area de Tecnologia de los Alimentos, CIT-INIA, Madrid, 28080, Spain

SO Journal of the Science of Food and Agriculture (1997), 74(2), 273-279

CODEN: JSFAAE; ISSN: 0022-5142

PB Wiley

DT Journal

LA English

AB The effect of germination conditions on some antinutrients of *Lens culinaris* var Magda 20 seeds were studied. The seeds were germinated at 20.degree.C under variable conditions of time, water and light. Quant. analyses of the soyasapogenols, inositol phosphates and tannins were carried out by capillary gas chromatog., high-performance liq. chromatog. and spectrophotometric techniques, resp.

Germinated seeds at day 6 contained higher levels soyasapogenol B than the controls, whereas in general the tannin content was reduced. Total phytic acid amts. did not decrease after 3 days of germination but it was greatly reduced after 6 days. This work shows that the optimal conditions to reduce some antinutritional factors (tannins and phytic acid) in lentils were 6 days of seed germination in the dark and with alternate watering.

Therefore, germination conditions offer a good opportunity to improve the nutritional quality of lentils.

L7 ANSWER 2 OF 31 CA COPYRIGHT 2002 ACS

AN 121:30348 CA

TI Alfalfa saponins and sapogenins: isolation and quantification in two different cultivars

AU Tava, A.; Oleszek, W.; Jurzysta, M.; Berardo, N.; Odoardi, M.

CS Ist. Sper. Colture Foraggere, Lodi, 20075, Italy

SO Phytochem. Anal. (1993), 4(6), 269-74

CODEN: PHANEL

DT Journal

LA English

AB The chem. characterization of the saponins and sapogenins isolated from roots and aerial parts of two alfalfa cultivars with differing saponin content is reported. A procedure for the extn. and quantification of saponins is described, and the identification of the major components of the saponin mixt. has been performed using thin layer chromatog. and high performance liq. chromatog. Characterization, using gas chromatog. (GC) and GC/mass spectral anal., of sapogenins released following acid hydrolysis allowed the identification of medicagenic acid, hederagenin, soyasapogenols B, C, D, E and F as the major compds., together with oleanolic acid. Quant. anal. of the sapogenins in aerial parts and roots of the two cultivars is reported and discussed.

L7 ANSWER 3 OF 31 CA COPYRIGHT 2002 ACS

AN 108:91706 CA

TI Studies on *Medicago lupulina* saponins. 6. Some chemical characteristics and biological activity of root saponins

AU Oleszek, Wieslaw; Jurzysta, Marian; Gorski, Piotr; Burda, Stanislaw; Ploszynski, Michal

CS Dep. Biochem., Inst. Uprawy, Nawozenia Glebozn., Pulawy, 24-100, Pol.

SO Acta Soc. Bot. Pol. (1987), 56(1), 119-26

CODEN: ASBNA2; ISSN: 0001-6977

DT Journal

LA English

AB The purified fraction of *Medicago lupulina* root saponins consists of 14 compds., 2 of which are medicagenic acid glycosides as indicated by 2-dimensional thin-layer chromatog. Its hydrolysis gave medicagenic acid, hederagenin, and soyasapogenols B, C, D, E, and F. The hemolytic, fungicidal, and allelopathic activities of *M. lupulina* were also studied.

L7 ANSWER 4 OF 31 CA COPYRIGHT 2002 ACS

AN 106:99430 CA

TI The saponin content and sapogenol composition of the seed of 13 varieties of legume

AU Price, Keith R.; Curl, Caralyn L.; Fenwick, G. Roger

CS Norwich Lab., AFRC Inst. Food Res., Norwich, NR4 7UA, UK

SO J. Sci. Food Agric. (1986), 37(12), 1185-91

CODEN: JSFAAE; ISSN: 0022-5142

DT Journal

LA English

AB The total saponin content of various legume seeds and their sapogenol compn. have been detd. Extn. of the defatted flours was effected with methanol and subsequent acid hydrolysis yielded the soyasapogenols which were analyzed with gas and thin-layer chromatog. The saponin levels ranged from 0-0.65% for defatted seed while the major sapogenol present in these saponins was soyasapogenol B. The figures obtained are compared with those previously reported, and reasons are suggested for the discrepancies.

L7 ANSWER 5 OF 31 CA COPYRIGHT 2002 ACS

AN 106:65901 CA

TI Soyasapogenols - separation, analysis and interconversions

AU Price, Keith R.; Fenwick, G. Roger; Jurzysta, Marian

CS Inst. Food Res., AFRC, Norwich, NR4 7UA, UK

SO J. Sci. Food Agric. (1986), 37(10), 1027-34

CODEN: JSFAAE; ISSN: 0022-5142

DT Journal

LA English

AB The hydrolysis products of soyasaponins in legumes and of pure stds. have been examd. using TLC, gas chromatog., and gas chromatog.-mass spectrometry. Interrelationships between eight soyasapogenols, produced under conditions of aq. or nonaq. acid hydrolysis, have been established. The significance of the work to the anal. of soyasaponins is discussed.

=> s 11 and polycystic

L11 0 L1 AND POLYCYSTIC

=> s 11 and kidney

L12 14 L1 AND KIDNEY

=> s 112 and treat

L13 2 L12 AND TREAT

=> s 11 and cystic

L14 0 L1 AND CYSTIC

=> dis l13 1-2 bib abs

L13 ANSWER 1 OF 2 CA COPYRIGHT 2002 ACS
AN 92:153139 CA
TI 3-O-(.beta.-D-Glucuronopyranosyl)soyasapogenol B
IN Shinohara, Masanao; Nakano, Yoshimasa; Kaise, Hirotugu; Izawa, Taketoshi;
Miyazaki, Wasei
PA Otsuka Pharmaceutical Co., Ltd., Japan
SO Ger. Offen., 45 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2911353	A1	19791011	DE 1979-2911353	19790322
	DE 2911353	C2	19871029		
	JP 54130551	A2	19791009	JP 1978-38536	19780331
	JP 58022120	B4	19830506		
	ZA 7901061	A	19800326	ZA 1979-1061	19790307
	AU 7944995	A1	19791004	AU 1979-44995	19790309
	AU 527201	B2	19830224		
	ES 478874	A1	19801001	ES 1979-478874	19790322
	BE 875105	A1	19790926	BE 1979-194225	19790326
	BE 875106	A1	19790926	BE 1979-194226	19790326
	NO 7900994	A	19791002	NO 1979-994	19790326
	NO 154584	B	19860728		
	NO 154584	C	19861105		
	FI 7901011	A	19791001	FI 1979-1011	19790327
	FI 67559	B	19841231		
	FI 67559	C	19850410		
	GB 2020290	A	19791114	GB 1979-10739	19790327
	GB 2020290	B2	19821027		
	DK 7901266	A	19791001	DK 1979-1266	19790328
	DK 162102	B	19910916		
	DK 162102	C	19920224		
	CA 1128498	A1	19820727	CA 1979-324367	19790328
	CH 640868	A	19840131	CH 1979-2859	19790328
	NL 7902449	A	19791002	NL 1979-2449	19790329
	AT 7902360	A	19820515	AT 1979-2360	19790329
	AT 369426	B	19821227		
	SE 7902866	A	19791016	SE 1979-2866	19790330
	SE 434269	B	19840716		
	SE 434269	C	19841025		
	FR 2421179	A1	19791026	FR 1979-8121	19790330
	FR 2421179	B1	19830318		

US 4217345	A	19800812	US 1979-25518	19790330
SU 1074408	A3	19840215	SU 1979-2745040	19790330
ES 487982	A1	19810116	ES 1980-487982	19800124
SU 1190989	A3	19851107	SU 1980-2954186	19800731
US 4371524	A	19830201	US 1981-241294	19810306
AT 8103847	A	19840815	AT 1981-3847	19810907
AT 377526	B	19850325		
PRAI JP 1978-38536		19780331		
JP 1978-59345		19780517		
AT 1979-2360		19790329		
US 1979-25517		19790330		

GI

AB The title compd. (I) [72584-55-5], obtained by alcoholysis-sapon. or hydrolysis of soyasaponin B [73201-76-0] or from cultures of *Stachybotrys*, had anticomplement activity and pharmaceutical formulations contg. I or its salts can be used to treat nephritis, autoimmune, collagen, or rheumatic diseases. Thus, soyasaponin B was subjected to methanolysis to give II [51247-04-2], which was saponified to give I. Injections contg. III [72584-56-6], and suppositories and tablets contg. I were prep'd.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1980:153139 CAPLUS

DN 92:153139

TI 3-O-(.beta.-D-Glucuronopyranosyl)soyasapogenol B

IN Shinohara, Masanao; Nakano, Yoshimasa; Kaise, Hirotugu; Izawa, Taketoshi; Miyazaki, Wasei

PA Otsuka Pharmaceutical Co., Ltd., Japan

SO Ger. Offen., 45 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

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DE 2911353	C2	19871029		
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AU 527201	B2	19830224		
ES 478874	A1	19801001	ES 1979-478874	19790322
BE 875105	A1	19790926	BE 1979-194225	19790326
BE 875106	A1	19790926	BE 1979-194226	19790326
NO 7900994	A	19791002	NO 1979-994	19790326
NO 154584	B	19860728		
NO 154584	C	19861105		
FI 7901011	A	19791001	FI 1979-1011	19790327
FI 67559	B	19841231		
FI 67559	C	19850410		
GB 2020290	A	19791114	GB 1979-10739	19790327
GB 2020290	B2	19821027		
DK 7901266	A	19791001	DK 1979-1266	19790328
DK 162102	B	19910916		
DK 162102	C	19920224		
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CH 640868	A	19840131	CH 1979-2859	19790328
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AT 7902360	A	19820515	AT 1979-2360	19790329
AT 369426	B	19821227		
SE 7902866	A	19791016	SE 1979-2866	19790330
SE 434269	B	19840716		
SE 434269	C	19841025		
FR 2421179	A1	19791026	FR 1979-8121	19790330
FR 2421179	B1	19830318		
US 4217345	A	19800812	US 1979-25518	19790330
SU 1074408	A3	19840215	SU 1979-2745040	19790330
ES 487982	A1	19810116	ES 1980-487982	19800124
SU 1190989	A3	19851107	SU 1980-2954186	19800731
US 4371524	A	19830201	US 1981-241294	19810306
AT 8103847	A	19840815	AT 1981-3847	19810907
AT 377526	B	19850325		
PRAI JP 1978-38536		19780331		
JP 1978-59345		19780517		
AT 1979-2360		19790329		
US 1979-25517		19790330		

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autoimmune, collagen, or rheumatic diseases. Thus, soyasaponin B was subjected to methanolysis to give II [51247-04-2], which was saponified to give I. Injections contg. III [72584-56-6], and suppositories and tablets contg. I were prep'd.

=> s e2

L15 2 SOYASAPONENOL/BI

=> s l15 and kidney

L16 0 L15 AND KIDNEY

=> s l15 abd cyst

MISSING OPERATOR L15 ABD

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l15 and cyst

L17 0 L15 AND CYST

=> s l15 and isolate

L18 0 L15 AND ISOLATE

=> s l15 and chromatography

L19 0 L15 AND CHROMATOGRAPHY

=> dis l15 1-2 bib abs

L15 ANSWER 1 OF 2 CA COPYRIGHT 2002 ACS

AN 118:55113 CA

TI Glucuronidase directly hydrolyzing glucuronide bond

IN Kudo, Shigemitsu; Okubo, Kazuyoshi

PA Ao, Teikichi, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 04267876	A2	19920924	JP 1991-48977	19910221
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AB The glucuronidase (I) cleaves directly the glucuronide bond between the sugar chain and hydrophobic aglycons such as soybean saponins. No glucuronic acid is released in the enzymic reaction. Aspergillus oryzae KO-2 was still-cultured in MY medium contg. crude soybean saponin, malt ext., yeast ext., and salts at 30.degree. for 4 days. The extracellular I

showed 1.49 .times. 10-3 unit/mL enzyme activity (1 unit = prodn. of 1 .mu.mol soyasapogenol B per min from soybean saponin Bb). Screening of I from various Aspergillus and substrate specificity of I are also described.

L15 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1993:55113 CAPLUS

DN 118:55113

TI Glucuronidase directly hydrolyzing glucuronide bond

IN Kudo, Shigemitsu; Okubo, Kazuyoshi

PA Ao, Teikichi, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI JP 04267876	A2	19920924	JP 1991-48977	19910221
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Screening of I from various Aspergillus and substrate specificity of I are also described.

09964554

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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FILE 'HOME' ENTERED AT 10:26:45 ON 14 JUN 2002

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 10:27:01 ON 14 JUN 2002
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FILE COVERS 1907 - 14 Jun 2002 VOL 136 ISS 24
 FILE LAST UPDATED: 12 Jun 2002 (20020612/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s saponin
      13295 SAPONIN
      10241 SAPONINS
L1      16564 SAPONIN
          (SAPONIN OR SAPONINS)
```

```
=> s l1 and soya
      6856 SOYA
      2 SOYAS
      6857 SOYA
          (SOYA OR SOYAS)
L2      157 L1 AND SOYA
```

```
=> s l2 and isoation
      13 ISOATION
L3      0 L2 AND ISOATION
```

=> sl2 and isolation
 SL2 IS NOT A RECOGNIZED COMMAND
 The previous command name entered was not recognized by the system.
 For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

```
=> s l2 and isolation
      208558 ISOLATION
      876 ISOLATIONS
      209119 ISOLATION
          (ISOLATION OR ISOLATIONS)
L4      16 L2 AND ISOLATION
```

```
=> s l4 and molasses
      18439 MOLASSES
      1 MOLASSESES
      18440 MOLASSES
```

(MOLASSES OR MOLASSESES)
L5 0 L4 AND MOLASSES

=> s 12 and molasses
18439 MOLASSES
1 MOLASSESES
18440 MOLASSES
(MOLASSES OR MOLASSESES)

L6 3 L2 AND MOLASSES

=> s 16 and soy
14990 SOY
2 SOYS
14990 SOY
(SOY OR SOYS)

L7 2 L6 AND SOY

=> s 12 and pharmaceutical
157607 PHARMACEUTICAL
67984 PHARMACEUTICALS
196926 PHARMACEUTICAL
(PHARMACEUTICAL OR PHARMACEUTICALS)

L8 20 L2 AND PHARMACEUTICAL

=> s 18 and carrier
212637 CARRIER
112681 CARRIERS
273256 CARRIER
(CARRIER OR CARRIERS)

L9 0 L8 AND CARRIER

=> s 18 and diluent
22007 DILUENT
9186 DILUENTS
27725 DILUENT
(DILUENT OR DILUENTS)

L10 0 L8 AND DILUENT

=> s 18 and composition
589040 COMPOSITION
236457 COMPOSITIONS
821760 COMPOSITION
(COMPOSITION OR COMPOSITIONS)

L11 1152501 COMPN
451277 COMPNS
1405101 COMPN
(COMPN OR COMPNS)
1837445 COMPOSITION
(COMPOSITION OR COMPN)

L12 11 L8 AND COMPOSITION

=> s 12 and treatment
1669429 TREATMENT
155848 TREATMENTS
1755918 TREATMENT
(TREATMENT OR TREATMENTS)

L12 20 L2 AND TREATMENT

=> s 112 and kidney
221463 KIDNEY
45428 KIDNEYS
237815 KIDNEY
(KIDNEY OR KIDNEYS)

L13 1 L12 AND KIDNEY

=> s 113 and cystic
10314 CYSTIC
1 CYSTICS
10315 CYSTIC
(CYSTIC OR CYSTICS)
L14 0 L13 AND CYSTIC

=> s 12 and cystic
10314 CYSTIC
1 CYSTICS
10315 CYSTIC
(CYSTIC OR CYSTICS)
L15 0 L2 AND CYSTIC

=> s 12 and chromatography
268118 CHROMATOGRAPHY
136 CHROMATOGRAPHIES
268220 CHROMATOGRAPHY
(CHROMATOGRAPHY OR CHROMATOGRAPHIES)
529343 CHROMATOG
2917 CHROMATOGS
531447 CHROMATOG
(CHROMATOG OR CHROMATOGS)
613016 CHROMATOGRAPHY
(CHROMATOGRAPHY OR CHROMATOG)
L16 21 L2 AND CHROMATOGRAPHY

=> s 116 and sepharose
34044 SEPHAROSE
86 SEPHAROSES
34058 SEPHAROSE
(SEPHAROSE OR SEPHAROSES)
L17 0 L16 AND SEPHAROSE

=> s 116 and hexadecyltrimethylammonium
3143 HEXADECYLTRIMETHYLMONIUM
L18 0 L16 AND HEXADECYLTRIMETHYLMONIUM

=> s 116 and hydrophobic
104777 HYDROPHOBIC
20 HYDROPHOBICS
104783 HYDROPHOBIC
(HYDROPHOBIC OR HYDROPHOBICS)
L19 0 L16 AND HYDROPHOBIC

=> dis 14 1-4 bib abs

L4 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 2002:227052 CAPLUS
DN 136:324290
TI Quantification of the Group B Soyasaponins by High-Performance Liquid Chromatography
AU Hu, Jiang; Lee, Sun-Ok; Hendrich, Suzanne; Murphy, Patricia A.
CS Department of Food Science and Human Nutrition, Iowa State University, Ames, IA, 50011, USA
SO Journal of Agricultural and Food Chemistry (2002), 50(9), 2587-2594
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
AB High-performance liq. chromatog. methods were developed for the isolation and quant. detn. of the group B soyasaponins, including 2,3-dihydro-2,5-dihydroxy-6-methyl-4H-pyran-4-one (DDMP)-conjugated soyasaponins .alpha.g, .beta.g, and .beta.a, and their non-DDMP counterparts, soyasaponins V, I, and II, resp., with formononetin used as

the internal std. The limits of quantification for soy products were 0.11-4.86 .mu.mol/g. The within-day and between-days assay coeffs. of variation were <9.8 and < 14.3%, resp. The group B soyasaponin concns. in 46 soybean varieties ranged from 2.50 to 5.85 .mu.mol/g. Soy ingredients (soybean flour, toasted soy hypocotyls, soy protein isolates, textured vegetable protein, soy protein concs., and Novasoy) and soy foods (com. soy milk, tofu, and tempeh) contained the group B soyasaponins from 0.20 to 114.02 .mu.mol/g. There was no apparent correlation between isoflavone and soyasaponin concns. in the soy products examd.

L4 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1999:670979 CAPLUS
DN 131:291261
TI Soybean drug and new method of extracting soybean **saponins**
IN Liu, Yaguang
PA USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5968516	A	19991019	US 1995-538389	19951003 ←
AB	A pharmaceutical compn. for treatment of cardiovascular disease, for increasing immune functions and for decreasing serum lipids contains soybean saponins . A process for producing soybean saponins comprises: (a) extg. a ground soybean residue with 95 % ethanol at room temp. for 24 h; (b) filtering the above mixt. and sepg. filtrate from residue; (c) adding ethanol to the filtered residue and refluxed in water bath for 6 h; (d) repeating the refluxed process in water bath for total 12 h; (e) cooling the refluxed ethanol mixt., filtering and combining all the filtrates; (f) recovering ethanol by reduced pressure distn. and dissolving the residue in distd. water; (g) adding ether to the above soln. to form ppt.; (h) collecting the ppt. by filtration; and (i) recovering ether by reduced pressure distn. in water bath and drying the residue under vacuum to result white or light yellow powder as a product.				

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1995:919054 CAPLUS
TI Artifacts and **saponins**.
AU Massiot, G.; Lavaud, C.; Dijoux, M-G.
CS Faculte de Pharmacie, Reims, 51096, Fr.
SO Book of Abstracts, 210th ACS National Meeting, Chicago, IL, August 20-24 (1995), Issue Pt. 1, AGFD-059 Publisher: American Chemical Society, Washington, D. C.
CODEN: 61XGAC
DT Conference; Meeting Abstract
LA English
AB Sepn. and structural elucidation of **saponins** are long and complex processes during which time, rearrangements and losses of fragile groups may occur. The use of high field NMR in the control of the **isolation** and sepn. steps allows to ascertain the conservation of all the elements of a **saponin**. This will be discussed with examples of **saponins** from **soya** and alfalfa, with the dihydropyrane appendage and from sugar beet, with seco-glycoside derivs.

L4 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1994:431355 CAPLUS
DN 121:31355
TI **Isolation** and purification of soyasaponins
IN Kudo, Shigemitsu; Ookubo, Kazuyoshi

particularly, a compn. is prep'd. by extg. phytochems. from plant matter. This compn. is enriched preferably in two or more isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compn. is a dietary supplement for treatment of various cancers, pre-and-post-menstrual syndromes, and various other disorders.

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2000:222893 CAPLUS
DN 132:333651
TI Characterization and antimutagenic activity of soybean saponins
AU Berhow, Mark A.; Wagner, Elizabeth D.; Vaughn, Steven F.; Plewa, Michael J.
CS United States Department of Agriculture, Agricultural Research Service, National Center for Agricultural Utilization Research, Peoria, IL, 61604, USA
SO Mutation Research (2000), 448(1), 11-22
CODEN: MUREAV; ISSN: 0027-5107
PB Elsevier Science B.V.
DT Journal
LA English
AB An ext. was prep'd. from a com. soybean-processing byproduct (soybean molasses) and was fractionated into purified chem. components. In previous work, this ext. (phytochem. conc., PCC) repressed induced genomic DNA damage, whole cell clastogenicity and point mutation in cultured mammalian cells. In the current study, a chem. fraction was isolated from PCC using preparative high-performance liq. chromatog. (HPLC). This fraction, PCC100, repressed 2-acetoxyacetylaminofluorene (2AAAF)-induced DNA damage in Chinese hamster ovary (CHO) cells as measured by single cell gel electrophoresis (alk. Comet assay). Using liq. chromatog.- electrospray ionization-mass spectroscopy and 1H and 13C NMR (NMR) spectroscopy, PCC100 was shown to consist of a mixt. of group B soyasaponins and 2,3-dihydro-2,5-dihydroxy-6-methyl-4H-pyran-4-one (DDMP) soyasaponins. These include soyasaponins I, II, III, IV, V, Be, .beta.a, .beta.a, .gamma.g and .gamma.a. Purified soyasapogenol B aglycon prep'd. from fraction PCC100 demonstrated significant antigenotoxic activity against 2AAAF. To our knowledge, these data demonstrate for the first time the antimutagenic activity of soybean saponins in mammalian cells.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 1999:241997 CAPLUS
DN 130:287063
TI Method of preparing and using phytochemicals
IN Empie, Mark; Gugger, Eric
PA Archer Daniels Midland Company, USA
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW

DT Patent
LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 906761	A2	19990407	EP 1998-308060	19981002	←
	EP 906761	A3	19990519			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	US 6261565	B1	20010717	US 1998-162038	19980928	
	ZA 9808962	A	19990913	ZA 1998-8962	19981001	
PRAI	US 1997-60549P	P	19971002			

PA Abo Sadakichi, Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06100583	A2	19940412	JP 1992-277828	19920922
	JP 2640066	B2	19970813		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Soyasaponins having aglycon soyasapogenol B (I; R = Q, Q1, Q2) are isolated and purified by extg. **soya** glycosides from soy beans with aq. MeOH, directly adsorbing the ext. on an ODS (octadecyl silyl) column, eluting the column with aq. MeOH, analyzing the effluents using thin layer chromatog. or HPLC, sep. selecting and collecting the fractions contg. each soyasaponin, and concg. the combined fractions to dryness. Soyasaponins are isolated as true **saponins** in 2 steps, since no alkali treatment was involved.

=> dis 16 1-3 bib abs

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:519341 CAPLUS
 DN 135:91861
 TI Method of preparing and using isoflavones
 IN Empie, Mark; Gugger, Eric
 PA Archer Daniels Midland Co., USA
 SO U.S., 8 pp., Cont.-in-part of U.S. 6,033,714.
 CODEN: USXXAM

DT Patent
 LA English
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6261565	B1	20010717	US 1998-162038	19980928
	US 5702752	A	19971230	US 1996-614545	19960313
	US 5792503	A	19980811	US 1997-868629	19970604
	US 6033714	A	20000307	US 1998-35588	19980305
	AU 9887879	A1	19990422	AU 1998-87879	19981001
	ZA 9808962	A	19990913	ZA 1998-8962	19981001
	EP 906761	A2	19990407	EP 1998-308060	19981002
	EP 906761	A3	19990519		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

JP 11221048	A2	19990817	JP 1998-296187	19981002
US 6391308	B1	20020521	US 2000-615239	20000713
US 6391309	B1	20020521	US 2000-615240	20000713
US 6391310	B1	20020521	US 2000-616205	20000713
US 6395279	B1	20020528	US 2000-616150	20000713
US 6399072	B1	20020604	US 2000-615152	20000713

PRAI US 1996-614545	A3	19960313		
US 1997-868629	A2	19970604		
US 1997-60549P	P	19971002		
US 1998-35588	A2	19980305		
US 1998-162038	A	19980928		

AB The invention provides for a refinement of phytochems. in order to tailor the refined end product to particular human dietary needs. More

US 1998-162038 P 19980928
 US 1996-614545 A3 19960313
 US 1997-868629 A2 19970604
 US 1998-35588 A2 19980305

AB A compn. is prep'd. by extg. phytochems. from plant matter. This compn. is enriched preferably in isoflavones, lignans, **saponins**, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compn. is a dietary supplement for treatment of various cancers, pre- and post-menstrual syndromes, and various other disorders.

=> dis 18 1-20 bib abs

L8 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:741892 CAPLUS

DN 133:313639

TI **Pharmaceutical** formulations comprising bisphosphonates and additive agents providing enhanced absorptions of the bisphosphonates
 IN Lindfors, Lennart; Lofroth, Jan-Erik; Sjogren, Sven; Ungell, Anna-Lena
 PA AstraZeneca AB, Swed.
 SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000061111	A1	20001019	WO 2000-SE664	20000406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1171097	A1	20020116	EP 2000-921288	20000406
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001004895	A	20011210	NO 2001-4895	20011008
PRAI	SE 1999-1272	A	19990409		
	WO 2000-SE664	W	20000406		

OS MARPAT 133:313639

AB The present invention provides **pharmaceutical** formulations comprising at least one bisphosphonate and an additive consisting of one or more absorption enhancing agents. The said **pharmaceutical** formulations are useful for the inhibition of bone resorption and for the treatment and prevention of osteoporosis. A compn. contg. alendronate 2.3, caprylic acid sodium salt 11.5 mg, and 50 mM Tris with 100 mM NaCl 1 g was formulated.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1999:783900 CAPLUS

DN 132:26671

TI Use of a cosmetically acceptable saponin or sapogenol as cosmetic agent for increasing the collagen IV in the dermal-epidermal junction

IN Bonte, Frederic; Dumas, Marc; Perrier, Pierre

PA Parfums Christian Dior, Fr.

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9962480	A2	19991209	WO 1999-FR1260	19990528
	WO 9962480	A3	20000720		
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2779058	A1	19991203	FR 1998-6821	19980529
	EP 1079797	A2	20010307	EP 1999-923642	19990528
	R: DE, ES, FR, GB, IT				
PRAI	JP 2002516837	T2	20020611	JP 2000-551737	19990528
	FR 1998-6821	A	19980529		
	WO 1999-FR1260	W	19990528		
AB	Saponins or sapogenols, in particular extd. from plants such as soya or Medicago, are used in cosmetol. and for making pharmaceutical compns. for skin treatment to increase the amt. of collagen IV in the dermal-epidermal junction. The invention also concerns novel cosmetic compns. promoting the increase of the amt. of collagen IV in the dermal-epidermal junction and a cosmetic treatment method using a saponin or sapogenol. The invention is applicable in cosmetics preferably in anti-wrinkle treatment and in pharmaceutics for treating diseases related to dermal-epidermal junction deficiency resulting from an insufficient amt. of collagen IV. Soya saponins at a concn. of 25 .mu.g/mL increased cultured keratinocytes collagen type IV by 37.5%. An antiaging cream contained retinol 4000 IU, soya saponins 0.01, glycerin 3, Commiphora mukkul 0.1, and fluid emulsion excipients q.s. 100 g.				

L8 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1999:766129 CAPLUS

DN 131:341987

TI Promoters for polypeptide drug mucosal absorption and compositions containing polypeptide drugs and absorption promoters

IN Xu, Huibi; Huang, Kaixun; Peng, Hong; He, Gongbei; Gao, Qiuhsia; Gao, Zhonghong; Yang, Xiangliang; Liu, Qiong; Qin, Hui; Yang, Jilin

PA Huazhong Science and Engineering Univ., Peop. Rep. China

SO Faming Zhanli Shenqing Gongkai Shuomingshu, 11 pp.

CODEN: CNXKEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1151323	A	19970611	CN 1995-119260	19951128
AB	Promoters for polypeptide drug mucosal absorption are selected from laurocapram, saponin, glycyrrhizin, glycolate, glycyrrhizinate, glycyrrhetic acid, Na glycyrrhetinate, and acid esters (such as decanoylphosphatidylcholine). A pharmaceutical compn. for mucosal absorption [buccal or sublingual tablet] contains proteinase inhibitor, pH buffer, excipient, binder, disintegrating agent, and lubricant in addn. to polypeptide drugs and the promoters. The polypeptide drugs are insulin, angiotensin, calcitonin, glucagon, .beta.-endorphin, muramyl dipeptide, enkephalin, neurotensin, parathyroid hormone, and TSH. The proteinase inhibitor is a protein of animals or plants including serum protein, casein, soya protein, glutelin, and zein. Buccal tablets were formulated contg. gelatin 80, glycyrrhetic acid 8, serum albumin 1.6, sodium citrate 8, flavors 0.8, and insulin 0.8 %.				

L8 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1999:670979 CAPLUS

DN 131:291261

TI Soybean drug and new method of extracting soybean saponins
IN Liu, Yaguang
PA USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5968516	A	19991019	US 1995-538389	19951003 ↙

PI A pharmaceutical compn. for treatment of cardiovascular disease,
for increasing immune functions and for decreasing serum lipids contains
soybean saponins. A process for producing soybean
saponins comprises: (a) extg. a ground soybean residue with 95 %
ethanol at room temp. for 24 h; (b) filtering the above mixt. and sepg.
filtrate from residue; (c) adding ethanol to the filtered residue and
refluxed in water bath for 6 h; (d) repeating the refluxed process in
water bath for total 12 h; (e) cooling the refluxed ethanol mixt.,
filtering and combining all the filtrates; (f) recovering ethanol by
reduced pressure distn. and dissolving the residue in distd. water; (g)
adding ether to the above soln. to form ppt.; (h) collecting the ppt. by
filtration; and (i) recovering ether by reduced pressure distn. in water
bath and drying the residue under vacuum to result white or light yellow
powder as a product.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1999:423195 CAPLUS
DN 131:242364
TI Physiological functions of soybeans .
AU Yoshikawa, Masayuki
CS Dept. of Pharmacology, Kyoto Pharmaceutical University, Japan
SO Shokuhin to Kagaku (1999), 41(5), 35-39
CODEN: SHTKAY; ISSN: 0037-4105
PB Shokuhin to Kagakusha
DT Journal; General Review
LA Japanese
AB A review with 9 refs. on physiol. functions of soybeans, esp. structures
and functions of soyasaponins.

L8 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1999:191259 CAPLUS
DN 131:27300
TI Review of studies on biological activities of soyasaponins
AU Qian, Zhong-Zhi; Dai, Xin-Yu; Ma, Xing-Sheng
CS Drug Control of Heilongjiang Province, Harbin, Peop. Rep. China
SO Studies in Plant Science (1999), 6(Advances in Plant Glycosides, Chemistry ↙ 1LL
and Biology), 193-195
CODEN: SPLCEU; ISSN: 0928-3420
PB Elsevier Science B.V.
DT Journal; General Review
LA English
AB A review with 15 refs. This review is about the studies on biol.
activities of soyasaponins (ss). These studies show that ss have
extensive biol. activities and pharmacol. values. Thus, ss may become new
drug resources for treating angiopathies and inhibiting cancer.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1996:175801 CAPLUS
DN 124:212104
TI Liposomes containing ginseng saponins or other active

IN ingredients for injection
 Ma, Shuxian; Su, Mingxian; Wang, Haibo
 PA Dalian Inst. of Medicinal Sciences, Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1110134	A	19951018	CN 1994-112420	19940730
	CN 1062733	B	20010307		

AB Liposomes contg. ginseng **saponins** or other active ingredients for injection are prepd. by dissolving e.g. ginseng **saponins** in water, distributing the soln. into vials, mixing with soybean phospholipids, cephalin and cholesterol in ether, and freeze-drying. The compns. were dissolved in injection water prior to administration. The method was simple and suitable for mass prodn.

L8 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1996:109303 CAPLUS
 DN 124:170516
 TI The advances in **soya saponin** research
 AU Wang, Zhangcun
 CS Zhengzhou Coll. Light Industry, Zhengzhou, 450002, Peop. Rep. China
 SO Zhongcaoyao (1995), 26(11), 607-10
 CODEN: CTYAD8; ISSN: 0253-2670
 DT Journal; General Review
 LA Chinese
 AB A review with 32 refs. It comprises the physiol. and **pharmaceutical** uses, structure, chem. compn., form, content, and application of **soya saponin**.

L8 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1995:543585 CAPLUS
 DN 122:274068
 TI Gelled aqueous compositions comprising acrylic polymers and surfactants
 IN Iliopoulos, Ilias; Cartalas-Sarrazin, Anne; Loyen, Karine; Audebert, Roland; Meybeck, Alain; Tranchant, Jean-Francois
 PA LVMH Recherche, Fr.
 SO PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9504774	A1	19950216	WO 1994-FR971	19940802
	W: JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2708616	A1	19950210	FR 1993-9607	19930804
	FR 2708616	B1	19951027		
	EP 712422	A1	19960522	EP 1994-923770	19940802
	EP 712422	B1	19990113		
	R: BE, CH, DE, ES, FR, GB, IT, LI				
	JP 09501196	T2	19970204	JP 1995-506247	19940802
	ES 2129660	T3	19990616	ES 1994-923770	19940802
	US 6288137	B1	20010911	US 1997-854413	19970512
	US 2002042453	A1	20020411	US 2001-845963	20010430
PRAI	FR 1993-9607	A	19930804		
	WO 1994-FR971	W	19940802		
	US 1996-592319	B1	19960304		
	US 1997-854413	A1	19970512		
AB	A method for prepg. an aq. compn. having the form of a gel at a given temp. is disclosed. The method is characterized in that a water-sol.				

assocn. polymer consisting of a main hydrophilic chain and hydrophobic pendant groups is contacted in said compn. with at least one surfactant having the form of bilayers when in an aq. soln. at the same temp. and concn. A gel contg. acrylic polymer and polyethylene glycol monododecyl ether was prep'd.

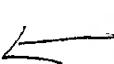
L8 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1995:511050 CAPLUS
DN 122:248082
TI Soyasaponins, valuable natural products
AU Wang, Zhangcun; Liu, Weidong
CS Dep. Food Eng., Zhengzhou Light Industry Coll., Zhengzhou, 450002, Peop. Rep. China
SO Shipin Kexue (Beijing) (1995), 16(2), 3-4
CODEN: SPKHD5; ISSN: 1002-6630
DT Journal; General Review
LA Chinese
AB A review with 17 refs. discussing soyasaponins, valuable natural products for therapeutic and other applications.

L8 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1993:610713 CAPLUS
DN 119:210713
TI Solubilization of **soya saponins** with cyclodextrins
IN Ooishi, Akio; Harada, Hiroshi; Isobe, Yosuke
PA Honen Corp, Japan
SO Jpn. Kokai Tokyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05186359	A2	19930727	JP 1991-359573	19911231
JP 3069652	B2	20000724		

AB **Soya saponins** are solubilized by addn. of .gamma.-cyclodextrin or its derivs. The obtained product can be used as a therapeutic agent and a food additive (no data). For example, defatted soybean was extd. with an alc. Saponin A fractions of the ext. were collected, concd., dried, and dissolved in water. .gamma.-Cyclodextrin was added to the soln. with stirring and heating. Finally, the soln. was freeze-dried.

L8 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1993:175781 CAPLUS
DN 118:175781
TI Complexes of **saponins** and their aglycons with phospholipids and **pharmaceutical** and cosmetic compositions containing them
IN Bombardelli, Ezio; Patri, Gianfranco; Pozzi, Roberto
PA Indena, S.p.A., Italy
SO U.S., 3 pp. Cont.-in-part of U.S. Ser. No. 514,216, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5166139	A	19921124	US 1991-643791	19910118 
PRAI IT 1987-19496		19870226		
US 1988-158577		19880222		
US 1990-514126		19900425		

AB Complexes of **saponins** from Centella asiatica and Terminalia with phospholipids where molar ratio of phospholipids to **saponins** is 0.5-2 have anti-inflammatory and antiedema effects. Sericoside (I) in CH₂Cl₂ was heated with distearoylphosphatidylcholine (II) to obtain I-II

complex. The complex at 1. μ M inhibited the croton oil-induced edema in mice ear by 90.3%.

L8 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1993:11724 CAPLUS
DN 118:11724
TI Extraction of therapeutic saponins from soybean hypocotyl
IN Nakamura, Junji; Okubo, Kazuyoshi; Suzuki, Masayuki; Magota, Hiromi
PA Dowa Mining Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04217629	A2	19920807	JP 1990-412328	19901219

AB Saponins are extd. efficiently from the hypocotyl of soybean. A stepwise extn. method was described using EtOH, isoamyl alc., and Bu alc. as solvents.

L8 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1992:91443 CAPLUS
DN 116:91443
TI Inhibitors of alcohol absorption in human digestive tract
IN Kato, Tamako; Sekiguchi, Tamayo; Kawaguchi, Makoto
PA Rohto Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03264534	A2	19911125	JP 1990-65056	19900315
	JP 2891738	B2	19990517		
	JP 11222438	A2	19990817	JP 1998-303805	19981026
	JP 3088707	B2	20000918		
PRAI	JP 1990-65056	A3	19900315		

AB The alc. absorption inhibitor contains (1) an oriental drug or its ext. and (2) soybean saponin and/or carnitine chloride. A pharmaceutical formulation contg. the inhibitor controls blood alc. increase in drinking alc. beverage. An oral liq. compn. consisted of carnitine chloride 200, a carrot ext. 50, Wuzhuyu powder 100, sucrose 1000, citric acid 70mg, and a flavor 0.03mL and water to 30 mL.

L8 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1991:614630 CAPLUS
DN 115:214630
TI Effect of various additives on fluidity of diflunisal suppository melts
AU Ishimaru, Sueaki; Kojima, Hideo; Shirakura, Osamu; Kawata, Masakazu; Goto, Shigeru
CS Dev. Res. Lab., Banyu Pharm. Co., Ltd., Saitama, 360-02, Japan
SO Yakuzaigaku (1991), 51(1), 1-7
CODEN: YAKUA2; ISSN: 0372-7629
DT Journal
LA Japanese
AB Diflunisal (DIF), a salicylic acid deriv., is an effective anti-inflammatory analgesic. Prepn. of DIF suppositories by the use of Pharmasol, a fatty base, was attempted. However, the DIF suppository melt had low fluidity. The fluidity of suppository melt is one of the important factors relating to manufg. efficiency and absorbability of suppositories. Accordingly, optimum additives which would be effective in overcoming the low fluidity of DIF suppository melts were detd. The fluidity was measured by the use of rotating-cylinder rheometer, and

Bingham viscosity and yield value were calcd. as the indexes of fluidity of the melt. Some lecithins were found to be effective in improving the fluidity of the DIF suppository melt, esp. in lowering the yield value. In the cases of soybean and egg lecithins, the greatest effect for the improvement of both indexes was obsd. with 4% addn., and after that no change was obsd. up to 8%. While in the case of hydrogenated soybean lecithin (Lecinol S-10), the optimum concn. was .apprx.4%. Also the effect of phosphatidylcholine (PC) concn. in lecithins on fluidity improvements of DIF suppository melts was detd.; Lecinol S-10 EX which contains high PC (>95%) was not effective in improving the low fluidity, while such lecithins as Lecinol S-10 (25-30%) and Lecinol S-10 M (55-65%) which do not contain high PC were effective.

L8 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1990:84153 CAPLUS

DN 112:84153

TI Soya saponin isolation from soybeans

IN Kitagawa, Isamu

PA Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

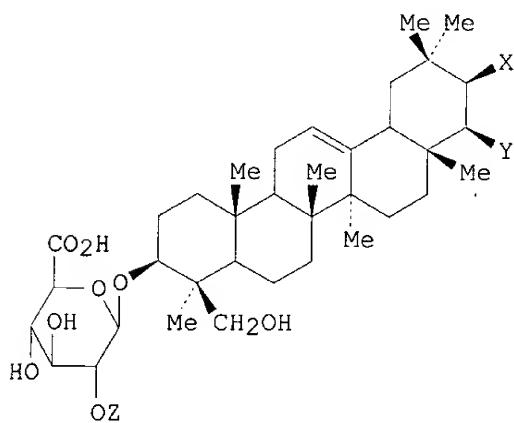
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01066196	A2	19890313	JP 1987-223280	19870907
OS	MARPAT 112:84153				
GI					



AB The **soya saponins** [I; when X = OH and Y = O-[2,3,4,6-tetra-O-acetyl-.beta.-D-glucopyranosyl (1 .fwdarw. 3)-.alpha.-L-arabinopyranosyl, then Z = .beta.-D-glucopyranosyl (1 .fwdarw. 2)-.beta.-D-galactopyranosyl, .beta.-D-galactopyranosyl; when X = OH and Y = O-[2,3,4-tri-O-acetyl-.beta.-D-xylopyranosyl (1 .fwdarw. 3)-.alpha.-L-arabinopyranosyl, then Z = .beta.-D-glucopyranosyl (1 .fwdarw. 2)-.beta.-D-galactopyranosyl, .beta.-D-galactopyranosyl or .alpha.-L-arabinopyranosyl; etc.] are isolated from soybean buds. Thus, the following **soya saponins** were isolated: acetylsoyasaponin A1, A2, A3, A4, A5, and A6, soyasaponin A3, A4, A5, and A6, and soyasaponin V. The acetylsoyasaponins are effective in stimulating gastric secretion, while soyasaponins V and A3-6 are effective in controlling lipid oxide formation.

L8 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1989:412504 CAPLUS

DN 111:12504

TI Complexes of saponins with phospholipids and pharmaceutical and cosmetic compositions containing them

IN Bombardelli, Ezio; Patri, Gian Franco; Pozzi, Roberto

PA Indena S.p.A., Italy

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 283713	A2	19880928	EP 1988-102321	19880218	↙
	EP 283713	A3	19900307			
	EP 283713	B1	19930811			
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE AT 92930 ES 2058151 JP 63277691	E T3 A2	19930815 19941101 19881115	AT 1988-102321 ES 1988-102321 JP 1988-43269	19880218 19880218 19880225	
PRAI	IT 1987-19496		19870226			
	EP 1988-102321		19880218			
AB	Complexes of saponins with a natural or synthetic phospholipids are highly lipophilic and have improved bioavailability. They are used as active ingredients in pharmaceutical, dermatol., and cosmetic compns. Sericoside (3.3 g) was treated with 4 g distearoylphosphatidylcholine to give a sericoside-distearoylphosphatidylcholine complex. This complex was more active than sericoside in the carrageenin edema test in rats, orally (no data). A gel contained sericoside-soy phosphatidylcholine (Lipoid S-100) 1.5, Kathon 0.1, imidazolidinurea 0.3, ethoxylated C8-C12 triglycerides 25, polyoxyethylene-20-deiletere 6, carboxyvinyl polymer 1.5, triethanolamine 2, perfume 0.2, and water 63.4 g.					

L8 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1988:62430 CAPLUS

Correction of: 1987:182629

DN 108:62430

Correction of: 106:182629

TI Extraction of pharmaceutical saponins from soybean buds

IN Hayashi, Giichi

PA Airin Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62005917	A2	19870112	JP 1985-145959	19850703
AB	Saponins free of toxic isoflavone contaminants are isolated from soybean embryonic buds. Soybean buds (1 kg) were extd. with 3 L 0.001 N HCl, 90% MeOH, and defatted with 1 L hexane. The ext. was concd., dild. with H2O to 2 L, treated with HP-20 resin adsorbent, eluted 1st with 20% Me2CO and then with 70% Me2CO. The latter eluant was concd. to give 24.38 g of a crude powder, 5.5 g of which was dissolved in 20 mL 99% MeOH, and subjected to Sephadex LH-20 gel filtration chromatog. to isolate 3.1 g of pure saponins.				

L8 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1987:595156 CAPLUS

DN 107:195156

TI Preparation of saponins from Astragalus membranaceus roots

IN Kadota, Akimi; Uchida, Yoshihiro
PA Osaka Yakuhin Kenkyusho K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	JP 62012792	A2	19870121	JP 1986-169997	19860718	
AB	Roots of <i>A. membranaceus</i> are extd. with a lower alc. The ext. is concd., treated with an adsorbent, and worked up by column chromatog. to give saponins . <i>A. membranaceus</i> Roots (8 kg) were refluxed with MeOH (18 L) for 5 h. The ext. was filtered, and the residues were exhaustively extd. with MeOH. The combined MeOH ext. was concd. in vacuo and worked up by column chromatog. and TLC to give astragaloside I 3.5, II 2.3, III 1, IV 0.8 g, V 100, VI 300, VII 100, VIII 600, acetylastragaloside I 200, isoastragaloside I 300, and soya saponin I 600 mg. All the above saponins markedly inhibited the formation of lipid peroxides by i.p. administration of adriamycin in male rats.					

L8 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1987:464877 CAPLUS

DN 107:64877

TI Appetite moderating and anti-gastritis composition

IN Ferro, Antonio

PA Crinos Industria Farmacobiologica S.p.A., Italy

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 219156	A1	19870422	EP 1986-201638	19860922 ↙
	EP 219156	B1	19901128		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 58639	E	19901215	AT 1986-201638	19860922
	AU 8663113	A1	19870402	AU 1986-63113	19860924
	AU 596119	B2	19900426		
	JP 62123122	A2	19870604	JP 1986-226308	19860926
	CA 1273874	A1	19900911	CA 1986-519222	19860926
	US 4999341	A	19910312	US 1989-414738	19890927
PRAI	IT 1985-22284		19850926		
	EP 1986-201638		19860922		
	US 1986-909930		19860922		
	US 1988-243192		19880908		
AB	Oral compns. for dietary and pharmaceutical use are prep'd. from aminopolysaccharides i.e. chitin, chitosan, and their salts, and soy saponins . These compns. have antigastritis and appetite modulating activity. The combination of the aminopolysaccharide and the soy saponins prevents the constipation or diarrhea with which these compds. are assocd. Tablets contg. chitosan 700, soy saponins 16, lactose 25, and Mg stearate 10 mg were prep'd.				

=> dis l11 bib abs

L11 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 2000:741892 CAPLUS

DN 133:313639

TI **Pharmaceutical** formulations comprising bisphosphonates and additive agents providing enhanced absorptions of the bisphosphonates
IN Lindfors, Lennart; Lofroth, Jan-Erik; Sjogren, Sven; Ungell, Anna-Lena
PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000061111	A1	20001019	WO 2000-SE664	20000406
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1171097	A1	20020116	EP 2000-921288	20000406
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001004895	A	20011210	NO 2001-4895	20011008

PRAI SE 1999-1272 A 19990409

WO 2000-SE664 W 20000406

OS MARPAT 133:313639

AB The present invention provides pharmaceutical formulations comprising at least one bisphosphonate and an additive consisting of one or more absorption enhancing agents. The said pharmaceutical formulations are useful for the inhibition of bone resorption and for the treatment and prevention of osteoporosis. A compn. contg. alendronate 2.3, caprylic acid sodium salt 11.5 mg, and 50 mM Tris with 100 mM NaCl 1 g was formulated.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> dis 113 1 bib abs

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

AN 1995:839086 CAPLUS

DN 123:218421

TI Endothelin-converting enzyme inhibitors containing soyasaponins and therapeutics for diseases

IN Sakai, Hiroshi; Hiramoto, Shigeru; Oowaki, Tatsuya; Nakada, Fumihsisa; Shirane, Katsunori; Hojo, Naomi; Fujimaki, Sumi; Komatsu, Hirohiko

PA Nisshin Flour Milling Co, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07188033	A2	19950725	JP 1993-334725	19931228
OS	MARPAT 123:218421				
AB	The enzyme inhibitors contain soyasaponins or their pharmacol. acceptable salts. Also claimed are therapeutics contg. the inhibitors as active ingredients for hypertension, twitch after subarachnoidal hemorrhage, myocardial infarction, arteriosclerosis, renal failure, cardiac failure, asthma, Raynaud disease, Buerger's disease, Takayasu's disease, Kawasaki's disease, and renal disorders in cisplatin therapy. Inhibition rates of soyasaponin II against endothelin-converting enzymes from human placenta and rat lung were 67 and 42%, resp., and the activity was specific to the enzyme. A tablet contg. soyasaponin I was formulated.				

=> dis 116 1-16 bib abs

L16 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 2002:227052 CAPLUS
DN 136:324290
TI Quantification of the Group B Soyasaponins by High-Performance Liquid Chromatography
AU Hu, Jiang; Lee, Sun-Ok; Hendrich, Suzanne; Murphy, Patricia A.
CS Department of Food Science and Human Nutrition, Iowa State University, Ames, IA, 50011, USA
SO Journal of Agricultural and Food Chemistry (2002), 50(9), 2587-2594
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
AB High-performance liq. chromatog. methods were developed for the isolation and quant. detn. of the group B soyasaponins, including 2,3-dihydro-2,5-dihydroxy-6-methyl-4H-pyran-4-one (DDMP)-conjugated soyasaponins .alpha.g, .beta.g, and .beta.a, and their non-DDMP counterparts, soyasaponins V, I, and II, resp., with formononetin used as the internal std. The limits of quantification for soy products were 0.11-4.86 .mu.mol/g. The within-day and between-days assay coeffs. of variation were <9.8 and < 14.3%, resp. The group B soyasaponin concns. in 46 soybean varieties ranged from 2.50 to 5.85 .mu.mol/g. Soy ingredients (soybean flour, toasted soy hypocotyls, soy protein isolates, textured vegetable protein, soy protein concs., and Novasoy) and soy foods (com. soy milk, tofu, and tempeh) contained the group B soyasaponins from 0.20 to 114.02 .mu.mol/g. There was no apparent correlation between isoflavone and soyasaponin concns. in the soy products examd.

L16 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 2001:780181 CAPLUS
DN 136:318763
TI Investigation of biological significance of soya saponins using monoclonal antibodies
AU Frokiaer, Hanne; Larsen, Svend Arild Juhl; Sorensen, Anne Dorthe; Sorensen, Hilmer; Sorensen, Jens Christian; Sorensen, Susanne
CS Section of Biochemistry and Nutrition, Technical University of Denmark, Lyngby, DK-2800, Den.
SO Special Publication - Royal Society of Chemistry (2001), 269(Biologically-Active Phytochemicals in Food), 74-76
CODEN: SROCD0; ISSN: 0260-6291
PB Royal Society of Chemistry
DT Journal
LA English
AB The biochem.-physiol. effects of soya saponins present in soya and pea were detd. with respect to particularly membrane or matrix assocn. and cholesterol and bile acid complexation. High performance liq. chromatog. of the saponin fraction isolated from pea showed only one dominating peak at the expected retention time and it was obsd. that a purity of saponin or about 50% had been obtained. The pools achieved from anion exchange purifn. of soya saponins were utilized for examn. of biol. effects in an in vitro expt. with dialysis of saponin in the presence of different compds. as BSA representing food protein and cholic acid and tauro cholic acid representing bile salts and cholesterol present during food uptake in the intestine. The effects on dialyzability compared to a ref. sample contg. only saponin sample and water were seen for the samples contg. cholic acid and tauro cholic acid above but not below the crit. micelle concns. of the compds. and that BSA also seemed to have an effect on saponin dialyzability. These results indicated that the susceptibility of saponin to be absorbed in the intestine was highly dependent on the conditions present in the intestine.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 2000:222893 CAPLUS
DN 132:333651
TI Characterization and antimutagenic activity of soybean saponins
AU Berhow, Mark A.; Wagner, Elizabeth D.; Vaughn, Steven F.; Plewa, Michael J.
CS United States Department of Agriculture, Agricultural Research Service,
National Center for Agricultural Utilization Research, Peoria, IL, 61604,
USA
SO Mutation Research (2000), 448(1), 11-22
CODEN: MUREAV; ISSN: 0027-5107
PB Elsevier Science B.V.
DT Journal
LA English
AB An ext. was prep'd. from a com. soybean-processing byproduct (soybean molasses) and was fractionated into purified chem. components. In previous work, this ext. (phytochem. conc., PCC) repressed induced genomic DNA damage, whole cell clastogenicity and point mutation in cultured mammalian cells. In the current study, a chem. fraction was isolated from PCC using preparative high-performance liq. chromatog. (HPLC). This fraction, PCC100, repressed 2-acetoxyacetylaminofluorene (2AAAF)-induced DNA damage in Chinese hamster ovary (CHO) cells as measured by single cell gel electrophoresis (alk. Comet assay). Using liq. chromatog.-electrospray ionization-mass spectroscopy and ¹H and ¹³C NMR (NMR) spectroscopy, PCC100 was shown to consist of a mixt. of group B soyasaponins and 2,3-dihydro-2,5-dihydroxy-6-methyl-4H-pyran-4-one (DDMP) soyasaponins. These include soyasaponins I, II, III, IV, V, Be, .beta.g, .beta.a, .gamma.g and .gamma.a. Purified soyasapogenol B aglycon prep'd. from fraction PCC100 demonstrated significant antigenotoxic activity against 2AAAF. To our knowledge, these data demonstrate for the first time the antimutagenic activity of soybean saponins in mammalian cells.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1998:724491 CAPLUS
DN 130:78725
TI Two new saponins from faba bean (*Vicia faba*)
AU Amarowicz, Ryszard; Yoshiki, Yumiki; Okubo, Kazuyoshi
CS Div. Food Sci., Inst. Animal Reproduction Food Research, Polish Acad.
Sci., Olsztyn, 10718, Pol.
SO Zeitschrift fuer Naturforschung, C: Biosciences (1998), 53(9/10), 918-920
CODEN: ZNCBDA; ISSN: 0341-0382
PB Verlag der Zeitschrift fuer Naturforschung
DT Journal
LA English
AB 2 New saponins were isolated from faba bean (*V. faba*) by column chromatog. (Sephadex LH-20 and ODS) and semi-preparative HPLC. Their mol. wts. detd. by FAB-MS were 980 and 964, resp. Results of TLC anal. showed that these compds. are similar to soya saponin group B. The presence of sepd. saponins was confirmed by TLC for seeds of 4 cultivars of faba bean.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1998:56185 CAPLUS
DN 128:86461
TI Presence of two saponins in faba bean (*Vicia faba*) seeds
AU Amarowicz, R.; Yoshiki, Y.; Pegg, R. B.; Okubo, K.
CS Div. Food Science, Inst. Animal Reproduction Food Research, Polish Academy Sciences, Olsztyn, 10718, Pol.

SO Nahrung (1997), 41(6), 352-354 ← ILL
CODEN: NAHRAR; ISSN: 0027-769X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
AB Two new saponins were isolated from faba beans by Sephadex LH-20 gel filtration, ODS column chromatog., and semi-preparative HPLC. The mol. wts. were 978 and 962, resp. The compds. were similar to soya saponin group B showed by TLC and FTIR spectroscopy. The presence of the sepd. saponins was confirmed by TLC for seeds of 4 cultivars of Vicia faba.

L16 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1997:452655 CAPLUS
DN 127:173435
TI Identification of soyasaponins by liquid chromatography -thermospray mass spectrometry
AU Fuzzati, N.; Pace, R.; Papeo, G.; Peterlongo, F.
CS Indena SpA, Laboratori Ricerca e Sviluppo, Via Don Minzoni 6, Settala (Milan), 20090, Italy
SO Journal of Chromatography, A (1997), 777(1), 233-238 ← ILL ? 2465 ·
CODEN: JCRAEY; ISSN: 0021-9673
PB Elsevier
DT Journal
LA English
AB Saponins are important bioactive mols. widespread in the plant kingdom. Soyasaponins, isolated from G. max (Leguminosae), have been shown to exhibit various biol. activities, e.g., an inhibitory effect on lipid-oxidn. and liver-lesion generation and an improving effect on hypercholesterolemia. Mass spectral investigation of these metabolites requires soft ionization techniques such as desorption chem. ionization, fast atom bombardment and thermospray mass spectrometry. A HPLC method was developed for thermospray mass spectrometric anal. of saponins contained in soybean flour exts. The analyses were performed using a ternary eluent (H₂O-MeOH-MeCN) in gradient conditions with post-column addn. of aq. ammonium acetate. Six saponin components were sepd. and identified. The mass spectra obtained provided information concerning both mol. masses and aglycon compn.

L16 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1996:448430 CAPLUS
DN 125:110308
TI Determination of saponins in the main legumes cultivated in Spain
AU Ayet, G.; Muzquiz, M.; Burbano, C.; Robredo, L. M.; Cuadrado, C.; Price, K. R.
CS SGIT, INIA, Madrid, 28080, Spain
SO Food Sci. Technol. Int. (London) (1996), 2(2), 95-100
CODEN: FSTIFZ; ISSN: 1082-0132
DT Journal
LA Spanish
AB The seeds of different legumes (*Lupinus albus*, *Lens culinaris*, *Cicer arietinum*, *Phaseolus vulgaris*, *Vicia faba*) were analyzed for soyasaponin content and soyasapogenol compn. using different chromatog. techniques. The soyasapogenol was present in all species, except in *L. albus*; the content ranged from 0.02 mg/g in *V. faba* to 1.21 mg/g in *P. vulgaris*. Two soyasaponins were detected by FAB-MS. Soyasaponin I was detected in the *L. culinaris*, *C. arietinum*, *V. faba* and *P. vulgaris* exts. and soyasaponin V in the *P. vulgaris* exts.

L16 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1995:358219 CAPLUS
DN 122:159010
TI Occurrence of saponins and sapogenols in Andean crops
AU Cuadrado, C.; Ayet, G.; Burbano, C.; Muzquiz, M.; Camacho, L.; Cavieres,

CS E.; Lovon, M.; Osagie, A.; Price, K. R.
Centro Investigacion Tecnol., CIT-INIA, Madrid, 28080, Spain
SO J. Sci. Food Agric. (1995), 67(2), 169-72 ← 1LL
CODEN: JSFAAE; ISSN: 0022-5142

DT Journal
LA English

AB Samples of bitter seeds of local ecotypes and cultivars of lupin (*Lupinus mutabilis*), white and yellow ecotypes of quinoa (*Chenopodium quinoa* Wild) and a local ecotype of amaranth (*Amaranthus caudatus*) grown in the Peruvian highlands were analyzed for total saponin content and sapogenol compn. Sweet cultivars of *L. albus* and *L. luteus* cultivated in mild-rainy lowlands of chile were also analyzed for comparison. Fast atom bombardment-mass spectrometry (FAB-MS) of the saponin exts. and gas chromatog. (GC) anal. of the sapogenols after acid hydrolysis of the crude ext. were used for the identification and quantification of saponins. It was found that *L. albus* and amaranth had undetectable levels of saponins making them attractive for human consumption. The cultivars and ecotypes of *L. mutabilis* contained saponin levels in the range of 229.8-390.5 mg kg⁻¹. FAB-MS showed the presence of soya saponins I and II, whereas GC allowed the identification of soya sapogenols A and B. The same saponin compn. was detd. in *L. luteus* whose total content was 55.3 mg kg⁻¹. Saponin compn. in quinoa seeds comprised oleanolic acid and three other sapogenols identified as hederagenin, phytolaccagenic acid and deoxyphytolaccagenic acid. Oleanolic acid saponins were found to be the main class of saponin in quinoa seeds. The yellow ecotype of quinoa presented a significantly higher content of saponins and of oleanolic acid as compared to white ecotypes. Since only one ecotype of amaranth was analyzed, the nutritional significance of no detectable saponin needs further study. The environmental conditions in the Peruvian highlands are determinants of the amt. and compn. of saponins present in bitter lupin and quinoa.

L16 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1994:504085 CAPLUS
DN 121:104085

TI Determination of the structures of soybean saponins by liquid chromatography / mass spectrometry
AU Sakabe, Terumi; Ohtsuki, Satoru; Tamura, Nobuhiro; Okubo, Kazuyosi
CS Anal. Res. Cent., Asahi Chem. Ind., Japan
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1993), 35th, 732-7 ← 1LL
CODEN: TYKYDS

DT Journal
LA English

AB Soybean seeds contain many kinds of saponins and some of them are considered to have defense effect on HIV (human immunodeficiency virus). Generally, saponins are classified to three groups (group A, B and E) according to their chem. structures. "Group A" saponins have two sugar chains which link to C-3 and C-22 aglycon structures. "Group B" and "Group E" have a single chain which linkes to C-3. The structures of "Group B" saponins was studied by using by Liq. Chromatography / Mass Spectrometry (LC/MS) technique. Five kinds of saponins were isolated named soyasaponins .alpha. g, .beta. g, .beta. a, .gamma. g, and .gamma. a, according to elution order from HPLC. Then the structures were characterized as 2, 3-dihydro-2, 5-dihydro-2, 5-dihydroxy-6-methyl-4h-pyran-4-one (DDMP) attaching through an acetal linkage to the C-22 hydroxyl of the aglycons of "Group B" saponins. Mechanism of formation of the sugar sequence was studied by using the same LC/MS technique.

L16 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1994:431355 CAPLUS
DN 121:31355
TI Isolation and purification of soyasaponins

IN Kudo, Shigemitsu; Ookubo, Kazuyoshi
PA Abo Sadakichi, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06100583	A2	19940412	JP 1992-277828	19920922
	JP 2640066	B2	19970813		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Soyasaponins having aglycon soyasapogenol B (I; R = Q, Q1, Q2) are isolated and purified by extg. soya glycosides from soy beans with aq. MeOH, directly adsorbing the ext. on an ODS (octadecyl silyl) column, eluting the column with aq. MeOH, analyzing the effluents using thin layer chromatog. or HPLC, sep. selecting and collecting the fractions contg. each soyasaponin, and concg. the combined fractions to dryness. Soyasaponins are isolated as true saponins in 2 steps, since no alkali treatment was involved.

L16 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1994:407650 CAPLUS

DN 121:7650

TI Isolation, identification and toxicity of saponin from different legumes

AU Khalil, A. H.; El-Adawy, T. A.

CS Fac. Agric., Menofiya Univ., Shibin El-Kom, Egypt

SO Food Chem. (1994), 50(2), 197-201 ← 1LL

CODEN: FOCHDJ; ISSN: 0308-8146

DT Journal

LA English

AB Saponin exts. were prep'd. from peas, beans and soybean seeds by four different methods. Two biol. assays were developed for measuring toxicity of crude saponin exts. based on hemolytic activity and fish mortality. The saponin exts. were able to lyse red blood cells with different velocity. The hemolytic activity of bean exts. were significantly higher than those of soybean and pea exts. Sensitivity of blood cells to crude saponin exts. was detected by sheep and rabbit blood cells. The highest hemolytic activities of sheep and rabbit blood cells were 30.0 and 6.24 mg saponin equiv./g legume sample, resp. The LD₅₀ of saponin to guppy fish was 150 .mu.g/mL. The ethanol/water (1:1) exts. showed the highest toxicity as revealed by both assays. TLC of crude saponin ext. from beans sepd. it into six fractions, whereas pea and soya bean were sepd. into seven and six fractions, resp. The TLC pattern of std. saponin indicated the presence of two main spots with Rf 0.75-0.85. Further purifn. of crude saponin exts. from legumes by silica gel column chromatog. increased the hemolytic activity of the active principle 5.7, 5.1 and 2-fold for bean, soya bean and pea exts., resp.

L16 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1988:597313 CAPLUS

DN 109:197313

TI Saponin and sapogenol. XLIV. Soyasaponin composition in soybeans of various origins and soyasaponin content in various organs of soybean. Structure of soyasaponin V from soybean hypocotyl

AU Taniyama, Toshio; Yoshikawa, Masayuki; Kitagawa, Isao

CS Fac. Pharm. Sci., Osaka Univ., Suita, 565, Japan
SO Yakugaku Zasshi (1988), 108(6), 562-71
CODEN: YKKZAJ; ISSN: 0031-6903
DT Journal
LA Japanese
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Saponin compns. in soybeans of 18 different origins were examd. and it was found that the content of acetyl soyasaponins A1, A2, A3, A4, A5, and A6 [with soyasapogenol A as the aglycon] varies depending upon the kind and the habitat. Saponins in seed coat, cotyledon, and hypocotyl of soybeans from USA, China, and Hokkaido, were examd. by TLC and HPLC, and quant. analyzed by gas chromatog. The seed coat does not contain saponin, whereas cotyledon contains saponin of soyasapogenol B (0.14-0.18%) and saponin of soyasapogenol A (0.07-0.09%). The saponin content in hypocotyl is much higher than that in cotyledon, i.e., soyasapogenol B-saponin 0.42-0.52% and soyasapogenol A-saponin 1.25-1.46%. A new saponin named soyasaponin V (I) was isolated from hypocotyl and its structure was detd.

L16 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1988:203361 CAPLUS
DN 108:203361
TI Saponin composition of 13 varieties of legume seed using fast atom bombardment mass spectrometry
AU Price, Keith R.; Eagles, John; Fenwick, G. Roger
CS Inst. Food Res., AFRC, Norwich, NR4 7UA, UK
SO J. Sci. Food Agric. (1988), 42(2), 183-93 ← 112
CODEN: JSFAAE; ISSN: 0022-5142
DT Journal
LA English
AB A mass spectrometric (fast atom Xe beam) technique is described which provides a fingerprint of the saponin compn. in crude exts. of 13 varieties of legume seeds. The ground seeds were defatted with CHCl₃ (extd. with MeOH, and the ext. was cleaned up on a reversed-phase octasilane-bonded silica gel column). The identity of individual saponins was confirmed by HPLC (Spherisorb ODS 2 column, MeCN-H₂O-F3CCO₂H 80:20:1 to 80:20:0.1 over 25 min, detection at 210 nm). The ability of this technique to predict the presence of unidentified saponins and, hence, its use for monitoring fractionation or isolation procedures is discussed.

L16 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1988:62430 CAPLUS
Correction of: 1987:182629
DN 108:62430
Correction of: 106:182629
TI Extraction of pharmaceutical saponins from soybean buds
IN Hayashi, Giichi
PA Airin Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 62005917	A2	19870112	JP 1985-145959	19850703
AB Saponins free of toxic isoflavone contaminants are isolated from				

soybean embryonic buds. Soybean buds (1 kg) were extd. with 3 L 0.001 N HCl. 90% MeOH, and defatted with 1 L hexane. The ext. was concd., dild. with H₂O to 2 L, treated with HP-20 resin adsorbent, eluted 1st with 20% Me₂CO and then with 70% Me₂CO. The latter eluant was concd. to give 24.38 g of a crude powder, 5.5 g of which was dissolved in 20 mL 99% MeOH, and subjected to Sephadex LH-20 gel filtration chromatog. to isolate 3.1 g of pure saponins.

L16 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2002 ACS

AN 1987:595156 CAPLUS

DN 107:195156

TI Preparation of saponins from Astragalus membranaceus roots

IN Kadota, Akimi; Uchida, Yoshihiro

PA Osaka Yakuhin Kenkyusho K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 62012792	A2	19870121	JP 1986-169997	19860718
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AB Roots of A. membranaceus are extd. with a lower alc. The ext. is concd., treated with an adsorbent, and worked up by column chromatog. to give saponins. A. membranaceus Roots (8 kg) were refluxed with MeOH (18 L) for 5 h. The ext. was filtered, and the residues were exhaustively extd. with MeOH. The combined MeOH ext. was concd. in vacuo and worked up by column chromatog. and TLC to give astragaloside I 3.5, II 2.3, III 1, IV 0.8 g, V 100, VI 300, VII 100, VIII 600, acetylastragaloside I 200, isoastragaloside I 300, and soya saponin I 600 mg. All the above saponins markedly inhibited the formation of lipid peroxides by i.p. administration of adriamycin in male rats.

L16 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2002 ACS

AN 1987:420743 CAPLUS

DN 107:20743

TI Soyasaponin IV, an additional monodesmosidic saponin isolated from soybean

AU Burrows, Jeremy C.; Price, Keith R.; Fenwick, G. Roger

CS Inst. Food Res., AFRC, Norwich, NR4 7UA, UK

SO Phytochemistry (1987), 26(4), 1214-15 ←

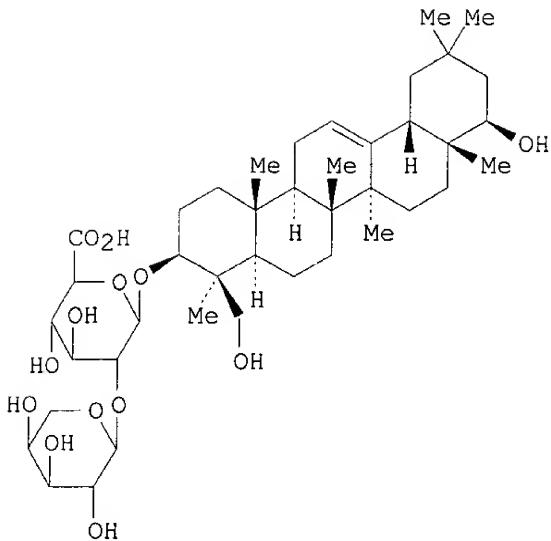
ILL. AK 861. P45

CODEN: PYTCAS; ISSN: 0031-9422

DT Journal

LA English

GI



I

AB A new **saponin** isolated from the methanolic ext. of soybean meal was named soyasaponin IV (I). Its structure was elucidated as 3-O-[.alpha.-L-arabinopyranosyl(1.fwdarw.2).beta.-D-glucuronopyranosyl(1.fwdarw.)]-3.β.,22.β.,24-trihydroxyolean-12-ene by gas **chromatog.**, **1H NMR**, and mass spectrometry.

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	140.66	140.87
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	-27.88	-27.88

STN INTERNATIONAL LOGOFF AT 10:37:18 ON 14 JUN 2002

L Number	Hits	Search Text	DB	Time stamp
1	5751	saponin	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:39
2	98	saponin and soya	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:39
3	10	(saponin and soya) and isolate	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:39
4	207099	((saponin and soya) and isolate) amd chromatography	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:40
5	9	((saponin and soya) and isolate) and chromatography	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:42
6	40	(saponin and soya) and pharmaceutical	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:42
7	28	((saponin and soya) and pharmaceutical) and composition	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:47
8	0	soyasaponinB	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:47
9	2	soyasaponin adj B	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:50
10	2	(soyasaponin adj B) and isolation	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:50
11	0	((soyasaponin adj B) and isolation) and cystic	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:51
12	1672	polycystic	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:51
13	856	polycystic and kidney	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:51
14	719	(polycystic and kidney) and treatment	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 08:51
15	9	((polycystic and kidney) and treatment) and saponin	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 09:20
16	1	((polycystic and kidney) and treatment) and saponin) and soy	USPAT; US-PGPUB; EPO; DERWENT	2002/06/14 09:21